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MOTOROLA

Patents Operations, Law Department

FACSIMILE TRANSMITTAL SHEET

Motorola, Inc.
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23 Number of Pages (including this page)

Attorney Docket No.: MESH006

Applicant(s)	John M. Belcea	Group Art Unit:	2667
Application No.:	09/846,434	Examiner:	Anh Vu H. LY
Filed:	May 2, 2001	Confirmation No.	2558
Title:	TIME DIVISION PROTOCOL FOR AN AD-HOC, PEER-TO-PEER RADIO NETWORK HAVING COORDINATING CHANNEL ACCESS TO SHARED PARALLEL DATA CHANNELS WITH SEPARATE RESERVATION CHANNEL		

In response to the Final Rejection mailed October 27, 2005, a reply was filed on January 12, 2006. However, it is noted on the Patent Office PAIR site that these papers are not entered and a Copy of the papers filed on January 12, 2006 is respectfully submitted herewith.

Enclosed herewith, please find the following documents for filing in the above-identified application:

Copies of Papers filed January 12, 2006:

Auto-Reply Facsimile Transmission	- 1 page
Transmittal Form	- 1 page
Power of Attorney executed by MeshNetworks, Inc.	- 1 page
Power of Attorney/Change of Address	- 1 page
Statement under 37 CFR 3.73(b)	- 1 page
Fee Transmittal	- 1 page, with authorization to charge fees
Amendment	- 15 pages
Terminal Disclaimer	- 1 page

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Freebourne /Vernice V. Freebourne June 9, 2006 /Date

Auto-Reply Facsimile Transmission

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TO: Fax Sender at 9547233871

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Date Received: 1/12/2006 4:37:36 PM [Eastern Standard Time]
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Docket Date	January 27, 2006	Attorney Docket No.:	MESH006

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Nancy Y. Freebairn January 12, 2006
Name Date

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/847,434
09/846,434	May 2, 2001
First Named Inventor	John M. Belcea
Group Art Unit	2667
Examiner Name	Anh Vu H. LY
Attorney Docket No.	MESH006

ENCLOSURES (check all that apply)

- [X] Fee Transmittal Form
- [ ] Fee Attached
- [X] Amendment/~~Reply~~
- [X] After Final
- [ ] Affidavits/Declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Documents
- [ ] Response to Missing Parts/ Incomplete Application
- [ ] Response to Missing Parts Under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-Related papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [X] Power of Attorney, ~~Revocation,~~ Change of Correspondence Address
- [X] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CDs ____
- [ ] After Allowance Communication to a Technology Center (TC)
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- [ ] Proprietary Information
- [ ] Status Letter with appropriate copies
- [X] Other Enclosure(s) (please identify below)
  Statement under 37 CFR 3.73(b)
  Power of Attorney executed by MeshNetworks, Inc.
  Facsimile Transmittal Sheet

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Randi L. Karpinia	Registration No.	46,148
Signature	Randi L. Karpinia		
Date	January 12, 2006		

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO to facsimile number 571-273-8300 or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on the date listed below:

Typed or printed name	Vernice V. Freebourne		
Signature	Vernice V. Freebourne	Date	January 12, 2006

COPY

POWER OF ATTORNEY

I, Richard Licursi, Chief Executive Officer, of MeshNetworks, Inc. (hereinafter "MeshNetworks"), a corporation duly organized under the laws of Delaware, United States of America, with my principal place of business being 485 North Keller Road, Suite 250, Maitland, Florida, USA 32751-7535, do hereby grant a power of attorney to Randi L. Karpinia, Senior Patent Attorney of Motorola, Inc. to take such actions and execute such documents as may be, from time to time, necessary to secure and protect the intellectual property rights of MeshNetworks. Without limitation, Randi L. Karpinia is authorized to execute affidavits and similar statements of fact, whether or not made under oath, related to the protection of MeshNetworks' intellectual property rights, to execute patent application documents, trademark registration documents, copyright registration documents, and similar documents related to the protection of MeshNetworks' statutory intellectual property rights, and to execute powers of attorney authorizing attorneys to represent MeshNetworks before the administrative agencies of the various countries in which MeshNetworks seeks to protect such intellectual property rights. This power of attorney shall expire as of December 31, 2007.

IN WITNESS WHEREOF, I have executed this power of attorney as of this 12 day of December 2005.

Richard Licursi
Chief Executive Officer
MeshNetworks, Inc.

STATE OF Florida)
)ss
COUNTY OF ORANGE)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that **Richard Licursi** whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 12 day of December, 2005.

Notary Public Signature

JEANNE V. SAMS
Printed Name of Notary Public

My commission expires:

JEANNE V. SAMS
Notary Public - State of Florida
My Commission Expires Sep 14, 2009
Commission # DD 4/2051
Bonded By National Notary Assn.

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POWER OF ATTORNEY OR AUTHORIZATION OF		
	Application Number	09/847,434
	Filing Date	May 2, 2001
	First Named Inventor	John M. Belcea
	Group Art Unit	2667
	Examiner Name	Anh Vu H. LY
	Attorney Docket Number	MESH006

I hereby appoint:

[X] Practitioners at Customer Number 24273

OR

[ ] Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark office connected therewith.

Please change the correspondence address for the above-identified application to:

[X] The above-mentioned Customer Number.

OR

[ ] Practitioners at Customer Number

OR

[X] Firm or Individual Name	MOTOROLA, INC., Law Department				
Address	8000 West Sunrise Boulevard				
Address	Law Department – MD 1610				
City	Plantation				
County		State	Florida	Zip	33322
Country	USA				
Telephone:	954-723-6449	Fax	954-723-3871		

I am the

[ ] Applicant/Inventor.

[X] Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

[X] Attorney/Agent of Record.

SIGNATURE of Applicant or Assignee of Record

Name	Randi L. Karpinia, Esq.
Signature	Randi L. Karpinia
Date	January 12, 2006

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of ____ form(s) are submitted.

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MESH006

STATEMENT UNDER 37 CFR 3.73 (b)

Applicant(s)/~~Patent Owner:~~ John M. Belcea
Application No./~~Patent No.:~~ 09/847,434 Filed/~~Issue Date:~~ May 2, 2001
Entitled: TIME DIVISION PROTOCOL FOR AN AD-HOC, PEER-TO-PEER RADIO NETWORK HAVING COORDINATING CHANNEL ACCESS TO SHARED PARALLEL DATA CHANNELS WITH SEPARATE RESERVATION CHANNEL

MeshNetworks, Inc. (Name of Assignee), a Corporation (Type of Assignee e.g., corporation, partnership, university, etc.),

states that it is:

1. [X] the assignee of the entire right, title, and interest; or
2. [ ] an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____ %

In the patent application/patent identified above by virtue of either:

A. [X] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 013307, Frame 0387, or for which a copy thereof is attached.

OR

B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____ or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____ or for which a copy thereof is attached.
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The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____ or for which a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet.

[ ] Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the Original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

January 12, 2006
Date

Randi L. Karpinia, Reg. No. 46,148
Typed or printed name

Randi L. Karpinia
Signature

Attorney of Record
Title

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Effective on 12/08/2004

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818)

FEE TRANSMITTAL
For FY 2005

☐

TOTAL AMOUNT OF PAYMENT	($) 130.00

Complete if Known	
Application Number	09/847,434
Filing Date	May 2, 2001
First Named Inventor	John M. Belcea
Examiner Name	Anh Vu H. LY
Group Art Unit	2667
Attorney Docket No.	MESH006

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify):_____

☒ Deposit Account Deposit Account Number: **502117** Deposit Account Name: **MOTOROLA, INC.**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Application Type	Fee ($)	Small Entity Fee ($)	Fee ($)	Small Entity Fee ($)	Fee ($)	Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims [ ] - 20 or HP= [ ] x Fee ($) [ ] = Fee Paid ($) [ ]

HP=highest number of total claims paid for, if greater than 20

Multiple Dependent Claims: Fee($) [ ] Fee Paid ($) [ ]

Indep. Claims [ ] - 3 or HP= [ ] x Fee ($) [ ] = Fee Paid ($) [ ]

HP=highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE:

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets [ ] - 100 = Extra Sheets [ ] /50 = Number of each additional 50 or fraction thereof (round up to a whole number) [ ] x Fee ($) Fee Paid($)

4. OTHER FEE(S)

Fee Paid ($)

Terminal Disclaimer $130.00

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Randi L. Karpinia	Registration No.	46,148	Telephone	954-723-6449
Signature	Randi L. Karpinia	Date	January 12, 2006		

Docket No. MESH006

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	John M. Belcea	Group Art Unit:	2667
Application No.:	09/846,434	Examiner:	Ly, Anh Vu H
Filed:	May 2, 2001	Confirmation No.	2558
Title:	TIME DIVISION PROTOCOL FOR AN AD-HOC, PEER-TO-PEER RADIO NETWORK HAVING COORDINATING CHANNEL ACCESS TO SHARED PARALLEL DATA CHANNELS WITH SEPARATE RESERVATION CHANNEL		

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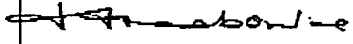
Date:	January 12, 2006
Signature:	
Typed or Printed Name:	Vernice Freebourne

AMENDMENT UNDER 37 CFR § 1.116

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication is responsive to the Office Action mailed October 27, 2005, concerning the above-identified application and is timely filed within the three month shortened statutory period for a response. Applicant submits the following Amendment and Remarks and respectfully requests the Examiner to reconsider the rejections made in the Action and to allow the claims to issue.

Please amend the application as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks/Arguments begin on page 12 of this paper.

Amendment to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

CLAIMS 1-50. (Cancelled)

CLAIM 51. (previously presented) A protocol for use in an ad hoc, peer to peer radio system comprising a series of terminals where each said terminal is capable of making at least one of an outgoing call or receiving an incoming call, and where each said terminal comprising computer means, memory means for storing program software means therein, and where each said terminal is capable of being hop of a routing path connecting a call from a source to a destination, comprising:

software means for said memory means of each said terminal, said software means comprising means for transmitting and receiving signals based on time-division messaging;

said signals being transmitted during a series of time frames (TM) each divided into a series of time slots (TS);

said at least one time slot transmitting traffic control signals at a first frequency of F0, and said other time slots (TS) transmitting data signals at frequencies of F1, F2, and F3, respectively;

each said time frame (TF) comprising an inter-frame time gap (IFTG) at the end of each said time frame (TF) in which no signals are transmitted, whereby each said terminal is allowed time to perform necessary calculations.

CLAIM 52. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 51, wherein said inter frame time gap (ITFG) could have a length different than said time slots.

CLAIM 53. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 52, wherein the length of each said time slot for transmitting said traffic control signals is equal to each other.

CLAIM 54. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 51, wherein the length of each said time slot for transmitting said traffic control signals is equal to each other.

CLAIM 55. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 54, wherein each said time frame (TF) further comprises a last time slot (LTS); said software means further comprising means for generating initial said traffic control signals in a respective said last time slot (LTS) of a respective said time frame (TF) indicating initial presence of a respective said terminal in order to start communicating with other said terminals.

CLAIM 56. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 55, wherein said software means further comprises means for switching transmission of initial said traffic control signals from said last time slot (LTS) to another, free, earlier time slot of a subsequent time frame (TF) in order to reduce the chance of collision with other said terminals also initially registering.

CLAIM 57. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 56, wherein said initial traffic control signals in said last time slot (LTS) and in said another, free, earlier time slot of a subsequent time frame (TF) are transmitted at said frequency F0.

CLAIM 58. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 55, wherein said software means comprises means for encoding the initial traffic control signals in said last time slot (LTS) using code-division multiple access (CDMA), whereby collisions in said last time slot (LTS) are avoided.

CLAIM 59. (Previously presented) The protocol for use in an ad hoc, peer to peer radio system according to claim 51, wherein said at least one time slot (TS) for said traffic control signals is transmitted at a maximum power level, and said other time slots (TS) for said data-signals are transmitted at a computed power level.

CLAIM 60. (Previously presented) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 59, wherein said computed power level is equal to or less than said ~~first~~ maximum power level, whereby radio frequency (RF) interference is reduced.

CLAIM 61. (currently amended) A method of transmitting radio calls in an ad-hoc, peer-to-peer radio system comprising a series of radio terminals forming a service group, each said radio terminal comprising transceiver means for transmitting and receiving signals from other like terminals of said series of terminals in the same service group, computer means and memory means for storing program software means therein, comprising:

(a) establishing a ~~a~~ connection with a said radio terminal based on time-division access;

(b) said step (a) comprising transmitting and receiving control and data signals as a series of time frames (TF) with each said time frame consisting of a plurality of time slots (TS);

(c) said step (b) comprising dedicating one said time slot for use as a configuration channel for transmitting information useful in establishing a routing path of a call;

(d) said step (b) further comprising dedicating other of said time slots for use as a data channels for transmitting the actual call information based on the class of service (COS) of the call;

(e) said step (b) further comprising forming an inter-frame time gap (IFTG) between said time frames (TF) during which each radio terminal may process said data received from another one of the terminals.

CLAIM 62. (Previously presented) The method of transmitting radio calls in an ad-hoc, peer-to-peer radio system according to claim 61, wherein said step (e) comprises making the length of said inter frame time gap (IFTG) longer than the lengths of said time slots (TS).

CLAIM 63. (Currently Amended) A ~~The~~ method of transmitting radio calls in an ad-hoc, peer-to-peer radio system ~~according to claim 61,~~ comprising a series of radio terminals forming a service group, each said radio terminal comprising transceiver means for transmitting and receiving signals from other like terminals of said series of terminals in the same service group, computer means and memory means for storing program software means therein, ~~further~~ comprising ~~before said step (a)~~:

(a) ~~(f)~~ initiating an outgoing call from one said radio terminal;

(b) ~~(g)~~ said step (a) ~~(f)~~ comprising registering with another said radio terminal for serving as a node in the call connection by transmitting a registration request;

(c) ~~(h)~~ said step (b) ~~(g)~~ comprising initially transmitting said registration request on a last of said time slots (TS) of a respective said time frame (TF), said last time slot serving as said configuration channel;

(d) establishing a connection with a said radio terminal based on time-division access;

(e) said step (d) comprising transmitting and receiving control and data signals as a series of time frames (TF) with each said time frame consisting of a plurality of time slots (TS);

(f) said step (e) comprising dedicating one said time slot for use as a configuration channel for transmitting information useful in establishing a routing path of a call;

(g) said step (e) further comprising dedicating other of said time slots for use as a data channels for transmitting the actual call information based on the class of service (COS) of the call;

(h) said step (e) further comprising forming an inter-frame time gap (IFTG) between said time frames (TF) during which each radio terminal may process said data received from another one of the terminals.

CLAIM 64. (Previously presented) The method of transmitting radio calls in an ad-hoc, peer-to-peer radio system according to claim 63, further comprising after said step (h):

(i) selecting in a time frame (TF), subsequent to said respective said time frame in which said registration messaging was sent by said step (h), a time slot (TS) earlier than said last time slot of said subsequent time frame as said configuration channel for transmitting configuration messaging.

CLAIM 65. (Previously presented) A protocol for use in a network of terminals each having computer means, memory means for storing program, and software means therein, said software means of each said terminal comprising means for transmitting and receiving signals based on time division messaging, said signals comprising a series of time frames (TF) each divided into a series of time slots (TS) comprising at least one time slot in which control signals are transmitted, and other time slots in which is transmitted data signals, the improvement comprising:

said at least one time slot transmitting said control signals at a first frequency of F0, and said other time slots (TS) transmitting said data signals at different respective frequencies;

each said time frame (TF) comprising an inter-frame time gap (IFTG) at the end of each said time frame (TF) in which no signals are transmitted, whereby each said terminal is allowed time to perform necessary calculations.

CLAIM 66. (Previously presented) The protocol according to claim 65, wherein said inter-frame time gap (ITFG) has a length different than said time slots.

CLAIM 67. (Previously presented) The protocol according to claim 66, wherein each said time frame (TF) further comprises a last time slot (LTS); said software means further comprising means for generating initial said control signals in a respective said last time slot (LTS) of a respective said time frame (TF) indicating initial presence of a respective said terminal in order to start communicating with other said terminals.

CLAIM 68. (Previously presented) The protocol according to claim 67, wherein said software means further comprises means for switching transmission of said initial control signals from said last time slot (LTS) to another, free, earlier time slot of a subsequent time frame (TF) in order to reduce the chance of transmission collision with other said terminals.

CLAIM 69. (Previously presented) The protocol according to claim 68, wherein said initial control signals are transmitted in said last time slot (LTS) and in said another, free, earlier time slot of a subsequent time frame (TF) are transmitted at said first frequency.

CLAIM 70. (Previously presented) The protocol according to claim 67, wherein said software means comprises means for encoding the control signals in said last time slot (LTS) using carrier sensing multiple access (CSMA), whereby collisions in said last time slot (LTS) are avoided.

CLAIM 71. (Previously presented) The protocol according to claim 67, wherein said at least one time slot (TS) for said control signals is transmitted at a first power level, and said other time slots (TS) for said data channel (DC) information are transmitted at a second power level.

CLAIM 72. (Currently Amended) A ~~The~~ protocol ~~according to claim 71,~~ for use in a network of terminals each having computer means, memory means for storing program, and software means therein, said software means of each said terminal comprising means for transmitting and receiving signals based on time division messaging, said signals comprising a series of time frames (TF) each divided into a series of time slots (TS) comprising at least one time slot in which control signals are transmitted, and other time slots in which is transmitted data signals, the improvement comprising:

said at least one time slot transmitting said control signals at a first frequency of F0, and said other time slots (TS) transmitting said data signals at different respective frequencies;

each said time frame (TF) comprising an inter-frame time gap (IFTG) at the end of each said time frame (TF) in which no signals are transmitted, wherein said inter-frame time gap (ITFG) has a length different than said time slots, whereby each said terminal is allowed time to perform necessary calculations,

wherein each said time frame (TF) further comprises a last time slot (LTS); said software means further comprising means for generating initial said control signals in a respective said last time slot (LTS) of a respective said time frame (TF) indicating initial presence of a respective said terminal in order to start communicating with other said terminals,

wherein said at least one time slot (TS) for said control signals is transmitted at a first power level, and said other time slots (TS) for said data channel (DC) information are transmitted at a second power level, wherein said second power level is equal to or less than said first power level and is computed according to quality reports received from all said terminals in a service group.

CLAIM 73. (Original) A protocol for use in an ad hoc, peer to peer radio system comprising a series of terminals where each said terminal is capable of making at least one of an outgoing call or receiving an incoming call, and where each said terminal comprising computer means, memory means for storing program software means therein, and where each said terminal is capable of being hop of a routing path connecting a call from a source to a destination, comprising:

software means for said memory means of each said terminal, said software means comprising means for generating communications information for transmission based on time-division messaging;

said communications-information comprising a series of time frames (TM) each divided into a series of time slots (TS); said communications-information comprising at least one time slot in which control-channel (CC) messaging information is transmitted, and other time slots in which is transmitted channel data (CD) messaging information;

said at least one time slot transmitting said control-channel information at a first frequency of F0, and said other time slots (TS) transmitting said data channel (DC) information at frequencies of F1, F2, and F3, respectively;

each said time frame (TF) comprising an inter-frame time gap (IFTG) at the end of each said time frame (TF) in which no communications-information is transmitted, whereby each said terminal is allowed time to perform necessary calculations;

wherein the length of each said time slot for transmitting said communications-information is equal to each other;

each said time frame (TF) further comprises a last time slot (LTS); and

said software means further comprises means for generating initial control communications-information in a respective said last time slot (LTS) of a respective said time frame (TF) indicating initial presence of a respective said terminal in order to start communicating with other said terminals.

CLAIM 74. (Original) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 73, wherein said software means further comprises means for switching transmission of initial control communications information from said last time slot (LTS) to another, free, earlier time slot of a subsequent time frame (TF) in order to reduce the chance of collision with other said terminals also initially registering.

CLAIM 75. (Original) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 74, wherein said initial control communications-information in said last time slot (LTS) and in said another, free, earlier time slot of a subsequent time frame (TF) are transmitted at said frequency F0.

CLAIM 76. (Original) The protocol for use in an ad-hoc, peer-to-peer radio system according to claim 73, wherein said software means comprises means for encoding the communications-information in said last time slot (LTS) using code-division multiple access (CDMA), whereby collisions in said last time slot (LTS) are avoided.

CLAIM 77. (Original) A method of transmitting radio calls in an ad-hoc, peer-to-peer radio system comprising a series of radio terminals forming a service group, each said radio terminal comprising transceiver means for transmitting and receiving signals from other like terminals of said series of terminals, computer means and memory means for storing program software means therein, comprising:

(a) initiating an outgoing call from one said radio terminal;

(b) establishing a call from a said radio terminal based on time-division access;

(c) said step (b) comprising creating messaging consisting of a series of time frames (TF) with each said time frame consisting of a plurality of time slots (TS);

(d) said step (c) comprising dedicating one said time slot for use as a configuration channel for transmitting information useful in establishing a routing path of a call;

(e) said step (c) further comprising dedicating other of said time slots for use as a data channels for transmitting the actual call information based on the class of service (COS) of the call;

(f) said step (c) further comprising forming an inter-frame time gap (IFTG) between said time frames (TF) during which each radio terminal may process said data received from another terminal;

(g) said step (a) comprising registering with another said radio terminal for serving as a node in the call connection by transmitting a registration request; and

(h) said step (g) comprising initially transmitting said registration request on a last of said time slots (TS) of a respective said time frame (TF), said last time slot serving as said configuration channel.

CLAIM 78. (Original) The method of transmitting radio calls in an ad-hoc, peer-to-peer radio system according to claim 77, further comprising after said step (h):

(i) selecting in a time frame (TF), subsequent to said respective said time frame in which said registration messaging was sent by said step (h), a time slot (TS) earlier than said last time slot of said subsequent time frame as said configuration channel for transmitting configuration messaging.

REMARKS/ARGUMENTS

Submitted herewith are new Powers of Attorney and a Change in Correspondence Address in this application. It is respectfully requested that the Docket Number in this application be changed to read – MESH006.

Claim 51-78 remain pending in this application.

In response to the office action, the status identifier for claim 52 was changed to "Original". Claims 63 and 72 were amended. Claim 61 was also amended to correct a typographical error in Step (a) of two "a" in a row. Claims 51, 53-60, and 62,64-71, and 73-78 remain unchanged.

Allowable Subject Matter

Applicants acknowledge the allowability of claims 77-78; and also the allowability of claims 63-64 and 72 once rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have rewritten claims 63 and 72 accordingly. Claim 64 is dependent upon Claim 63 and thus amendment is not needed. Applicants thank the examiner for the allowance of these claims.

Double Patenting Rejection of Claims 51,53-57,59-61,65-71,73-75, and 77:

Applicant respectfully notes that Claim 77 was indicated as allowable by the Examiner in item 9 of the office action; and then also rejected for double patenting in the office action in item 3 of the office action. Applicant has responded according to the rejection nevertheless.

In response to the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting of Claims 51,53-57,59-61,65-71,73-75, and 77 as being unpatentable over claims 8-13, 33, and 41-47 of United States Patent Number 6,807,165 B2, a terminal disclaimer, in compliance with 37 CFR § 1.321(c), is filed of even date herewith to overcome the double patenting rejection. Since the above mentioned application and United States Patent Number 6,807,165 B2 are commonly owned by the same assignee of the application, it is believed that the terminal disclaimer overcomes the double patenting rejection.

Double Patenting Rejection of Claim 52:

In response to the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting of Claim 52 as being unpatentable over claim 8 of United States Patent Number 6,807,165 B2 in view of Narvinger et al (United States Patent number 6,868,075 B1), a terminal disclaimer, in compliance with 37 CFR § 1.321(c), is filed of even date herewith to overcome the double patenting rejection. Since the above mentioned application and United States Patent Number 6,807,165 B2 are commonly owned by the same assignee of the application, it is believed that the terminal disclaimer overcomes the double patenting rejection.

Double Patenting Rejection of Claim 58:

In response to the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting of Claim 58 as being unpatentable over claim 8 of United States Patent Number 6,807,165 B2 in view of Bolgiano et al (United States publication number 2005/0185627), a terminal disclaimer, in compliance with 37 CFR § 1.321(c), is filed of even date herewith to overcome the double patenting rejection. Since the above mentioned application and United States Patent Number 6,807,165 B2 are commonly owned by the same assignee of the application, it is believed that the terminal disclaimer overcomes the double patenting rejection.

Double Patenting Rejection of Claim 62:

In response to the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting of Claim 62 as being unpatentable over claim 33 of United States Patent Number 6,807,165 B2 in view of Narvinger et al (United States Patent number 6,868,075 B1), a terminal disclaimer, in compliance with 37 CFR § 1.321(c), is filed of even date herewith to overcome the double patenting rejection. Since the above mentioned application and United States Patent Number 6,807,165 B2 are commonly owned by the same assignee of the application, it is believed that the terminal disclaimer overcomes the double patenting rejection.

Double Patenting Rejection of Claim 76:

In response to the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting of Claim 76 as being unpatentable over claims 8-10 of United States Patent Number 6,807,165 B2 in view of Bolgiano et al (United States publication number 2005/0185627), a terminal disclaimer, in compliance with 37 CFR § 1.321(c), is filed of even date herewith to overcome the double patenting rejection. Since the above mentioned application and United States Patent Number 6,807,165 B2 are commonly owned by the same assignee of the application, it is believed that the terminal disclaimer overcomes the double patenting rejection.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

The Applicants believe that the subject application, as amended, is in condition for allowance. Such action is earnestly solicited by the Applicants.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant's attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

The Commissioner is hereby authorized to charge Deposit Account 502117, Motorola, Inc, with any fees which may be required in the prosecution of this application.

Respectfully submitted,

January 12, 2006

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TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A PRIOR PATENT	Docket Number MESH006

In re Application of:	John M. Belcea		
Application No.:	09/846,434	Art Unit:	2667
Filed:	May 2, 2001	Examiner:	Anh Vy H. LY
For:	TIME DIVISION PROTOCOL FOR AN AD-HOC, PEER-TO-PEER RADIO NETWORK HAVING COORDINATING CHANNEL ACCESS TO SHARED PARALLEL DATA CHANNELS WITH SEPARATE RESERVATION CHANNEL		

The owner Motorola, Inc. of one hundred (100%) percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 and 173, as presently shortened by any terminal disclaimer, of prior Patent Number 6,807,165. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of the prior patent, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submission on behalf of an organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney of record.

Randi L Karpinia — Signature

January 12, 2006 — Date

Randi L. Karpinia
Typed or printed name

954-723-6449
Telephone Number

☒ Terminal Disclaimer fee under 37 CFR 1.20(d) is included

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Office, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.**